Mentoring Web Science MSc students

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ABSTRACT

Mentoring is a key part of the MSc experience for students at the University of Southampton. It is instrumental in facilitating non-academic support, group discussions at cohort level and individuals' study skills. Mentoring Web Science students poses a particular challenge, due to the diversity of cohorts and the interdisciplinarity of the course. In this reflective piece, the authors share their collective experience from the perspectives of the mentees, mentors, and coordinators of the scheme.

KEYWORDS

Mentoring; Student Support; Taught Postgraduate Courses; Learning Environment; Best Practice

1   INTRODUCTION

Mentors can help students navigate organisational requirements and overcome barriers to success in their degrees. In recognition of the value a mentor can add to the student experience, the department of Electronics and Computer Science at the University of Southampton has established a mentoring program in 2010. It is based on the concept that PhD students who have been recruited from the universities own MSc courses are most able to support future cohorts. They can offer advice from a student perspective, having recently completed it themselves. The program is supported by the department both administratively and financially, and managed by a coordinator from within the faculty.

Mentoring as a practice is a key part of the MSc experience in Southampton, and since it began has been instrumental in facilitating non-academic support, group discussions at cohort level and individuals' study skills. Groups of up to 10 students are assigned a PhD candidate as a group mentor, who enables them to hit the ground running. The role of the mentor is to act as an 'expert MSc student', share their own experience with the course and help the students navigate the new environment and avoid pitfalls in the course.

The mentoring of Web Science cohorts, however, presents additional challenges to those encountered within pure Electronics or Computer Science degrees. In this reflective piece, we will discuss the specific challenges in supporting Web Science MSc students, which are due to the interdisciplinarity as well as the different career paths of students.

2   WEB SCIENCE COURSE

The Web Science Centre for Doctoral Training at the University of Southampton recruits students from a wide variety of backgrounds – from law through archaeology to music and geography. Only a small percentage of students have a background in the two subjects that make up most of the curriculum: computer science and sociology. Most students are recruited not for a standalone MSc, but for an integrated PhD, combining a one-year MSc with a three year PhD course. However, students can also apply for, or be offered, a place on the MSc program on its own. Every cohort consists of about 15 students, about 80% of which are fully funded iPhD students. This leads to a natural division: The iPhD students are required to finish the MSc with a pass mark of at least 60%, while those who study just the MSc are under more pressure financially, as they have to fund the course themselves and consider their job opportunities afterwards.

Those who continue to doctoral studies need to transition effectively from the taught to the research element, which has its own challenges that the mentoring experience helps to prepare for. Those students who subscribe to the MSc course as a stand-alone need a different kind of support.

The different backgrounds of students in any one cohort are an asset. They can – and are indeed expected to – learn from one-another as much as from lecturers. This is especially important between students coming from hard and soft sciences. Mentors the needs of both groups, as they are interdisciplinary researchers themselves, and have experienced many of the challenges that the course holds. The mentors are better placed to understand the situation students are in due to their experience. This enables them to provide perspective that the students otherwise would not have.

3   MENTORING

The mentor program provides a safe space to ask 'stupid questions', and to allow the mentor to point the students in the right direction, whether this is to find the answer to a procedural question, or to receive further guidance on a particular module. The mentors supplement the delivered content with the experience of having completed the course. Each student will have different requirements. For example, students who moved to Southampton from other parts of the country or the world will need support getting to know life in the new environment. Students who have a background in social science will have more technical questions, and vice versa. Students will also have different expectations of the course, and of them on the course. Mentors are a first point of contact about all of these questions, as well as some highly sensitive personal issues that students may need support with, but are not aware of the support structure available through the university.

3.1 Communication

Mentors hold regular meetings with the students, either weekly or fortnightly, depending on the groups' preference. Each meeting has an agreed theme that is relevant to what the students are working on, such as a particular piece of coursework, or teaching skills like presenting or creating posters.

In addition to that, students can contact their mentor with questions for information or enquiries about responsibilities, e.g. to ask for a specific question. Most of the time, this happens by email, but many mentors are also available through social media. Because mentors are students themselves, they are more relatable, and students do not need to feel like they are a bother, regardless of how many questions they ask.

3.2 Knowledge about the course

Since the course requires students to master social theory as well as programming skills, it is in every cohort's interest to work together and pool the shared expertise among the group. The mentor meetings enable them to form a cohesive group, to get together and discuss issues from their different points of view, and create a sense of 'togetherness'.

It is key that the mentors have recently been students themselves on the MSc course, and can provide guidance and clarity from their own experience. The guidance and additional information that mentors deliver gives students a deeper insight into the expectations of the course. Having lived through the MSc year, mentors are able to relay personal experience about getting the most relevant skills or knowledge out of a module, or achieving those extra marks from a piece of work. The mentor has a good understanding of how certain lecturers work and what they expect, or how to manage issues in group work.

Mentors provide general guidance such as pointing out and explaining the marking criteria as a guide to completing their work. They can share examples of work from previous cohorts, which is sometimes the most up-to-date resource available, and thus most useful to students. Moreover, mentors disseminate positive thinking: A simple 'you will be fine' is sometimes all that a student needs to hear. All of these aspects are crucial to getting the best out of the MSc year.

3.3 Different goals of students

The difference between MSc and iPhD students' career trajectories leads to different requirements from their mentor. While both groups share the same modules and assessments, they have a very distinct experience, and the advice that will be vital for one part of the group – such as how to select a supervisor that can support them for the next three years – is not applicable to the other. This will often be frustrating to students, especially if they would prefer to have the other experience but cannot have it due to factors outside of their control. This is why the coordinator assigns mentors individually to both groups, rather than one mentor across both of them. Both groups require different kinds of advice.

Those students who are only subscribed to the MSc course rarely have the intention to pursue a career in academia. They need more short-term and course focussed guidance, more advice transferable skills and career development.

For the iPhD students, the main focus is on passing the MSc year with a high enough mark to then continue research on their chosen topic. It is also about gaining the most from the MSc year, to acquire new skills that they will need to use, such as data mining or performing statistical analysis. The interdisciplinary environment of the course is very demanding not only in terms of learning new skills, but also requires students to become resilient. Students need to learn how to be academics. These soft skills are not taught explicitly, but implicitly required, particularly in the PhD part of the course.

3.4 Network sharing

Those students who become mentors are likely to be very engaged not only in their own studies, but also in the CDT as a whole. They create working relationships with module leaders, directors and course administrators, by being involved in CDT activities and attending extracurricular events. For that reason they can offer support in both directions, and act as a bridge between students and staff.

Drawing on these relationships also enriches the support mentors can offer to students. For example, when students need to select supervisors for their MSc dissertation, who subsequently become their PhD supervisors by default, the mentors are able to introduce students to academic staff whose interests coincides with their own. The mentors do not only share their experience, but also their existing network, thus enabling students to fast track their own network-building.

4   CONCLUSION

Mentors are an important resource, both because of their experience, and due to the soft skills they convey. They significantly improve the experience of students, and help them to cope with a very demanding course. Essential to this is their understanding of the interdisciplinary environment of the course.

Often, students who had a good experience with their mentor become mentors themselves. This also leads to 'inherited' knowledge that is transferred between cohorts. Because mentors are in a unique position to field both questions and worries from students, they have been instrumental in creating resources, such as a handbook answering questions about progression onto the PhD part of the course.

To enable all of this, the coordinator needs to recognise and understand differences in student requirements, and assign mentors accordingly.